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Ride By Wire System – Installation manual

This equipment comprises 2 parts:
BD_DCM_01 – DC motor and integral gearbox with extension wiring
BD_TCM_05 – Hardware system comprising mounting components, pulley and bearing block

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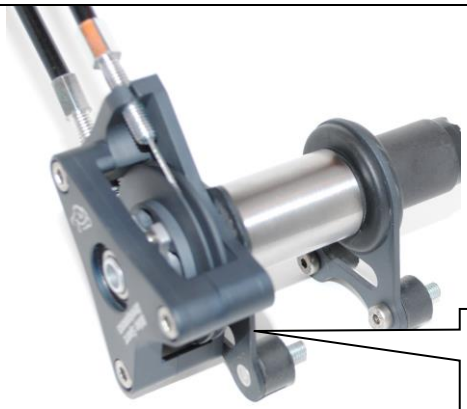
Step 1

Slide the front mounting support plate over the motor body.

This plate cannot be fitted afterwards so must be in place first.



Step 2

Fit the DC motor to the rear plate as using the M3 x 8mm screws. Use Loctite 243 medium strength

Step 3

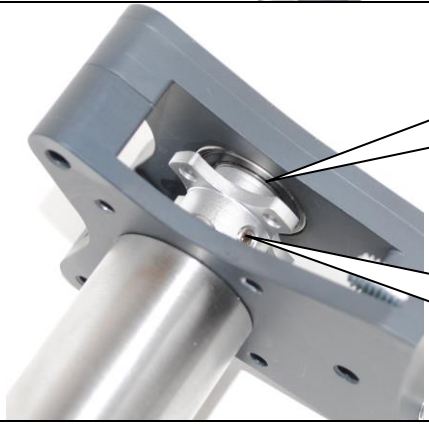
Slide the centre spindle over the motor shaft but as this stage do not tighten the grub screw

Step 4

Fit the end bearing plate using hand tightness and push the centre spindle up against the bearing to remove any end float.

Now tighten the M4 grub screw – Use Loctite 243 – Med strength.

This grub screw is vitally important for system integrity and should be checked for tightness as a service item.



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Step 4 Slide the pulley wheel over the centre spindle then rotate 90 deg to line up the mounting holes. Secure in position using the M3x8mm cap screws and Loctite 243 Now fit your throttle cables noting that the pulley is shown in the 'middle of range' position. Step 4 Continued on next page	
Step 4 – continued The pulley wheel can be rotated by hand to achieve this 'middle of range' position.	
Step – 5 The end bearing cover can now be fitted using the M5 cap screws and Loctite 222 – Low strength It is very important that the cable pulley in in the 'middle of range' position when securing the bearing plate.	

Wiring on DC Motor - ASL6 06 05 PB HE

1 – DC Motor -
2 – DC Motor -
3 – DC Motor +
4 – DC Motor +
5 – Not used

Installation:

1. Always use the 3 AV mounts. Failure to do this will result in premature failure of the gearbox or motor
2. Be aware that temperature max is normally seen during heat soak periods following an engine run.
3. Use of non-standard screws can cause spindle jamming or damage to the motor.
4. It is the responsibility of the customer to ensure that sufficient checks and electronic strategies are in place to safely control the car/bike in the event of any components failure, and that regular functionality tests and tightening checks are carried out.

Specifications:

Working temperature range	–30 to +100°c (Max 125 °c)
Peak torque	4.5Nm
Continuous rated torque	3.5Nm
Weight inc mounts	400g
Recommended motor life	80 hours (1 race season inc tests)

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